AMENDMENTS

In the Claims

Please cancel Claims 108-132, 134-141, 143-144, 146, 148, 151-153, 158-159, 161-163, 164-173, 178-181, 184-189, 191-193, 195-198, and 200-259 without prejudice.

Please add new Claims 260-276.

260. (New) An in vivo method of delivering a pharmaceutical composition to a target polynucleotide comprising administering to the airways of a subject said pharmaceutical composition of a respirable or inhalable particle size comprising a nucleic acid that comprises at least one oligonucleotide effective to alleviate hyper-responsiveness to adenosine or increased levels of adenosine, or to alleviate bronchoconstriction, asthma, or lung allergy, wherein the oligonucleotide is 4 to 60 nucleotides long and comprises up to about 15% adenosine.

261. (New) The method of claim 260, wherein the oligonucleotide comprises up to about 10% adenosine.

262. (New) The method of claim 261, wherein the oligonucleotide comprises up to about 5% adenosine.

263. (New) The method of claim 262, wherein the oligonucleotide comprises up to about 3% adenosine.

264. (New) The method of claim 263, wherein the oligonucleotide is adenosine-free.

265. (New) The method of claim 260, wherein the oligonucleotide is 9 to 51 nucleotides long.

266. (New) The method of claim 265, wherein the oligonucleotide is 18 or 21

nucleotides long.

267. (New) The method of claim 260, wherein the pharmaceutical composition is administered by inhalation directly to the airway or lung of the subject.

268. (New) The method of claim 260, wherein the oligonucleotide is antisense to the initiation codon, the coding region or the 5' or 3' intron-exon junction of a gene encoding a protein associated with hyper-responsiveness to adenosine, hyper-responsiveness to increased levels of adenosine, hyper-responsiveness to increased levels of an adenosine receptor, bronchoconstriction, asthma, lung allergy, or lung inflammation, or is antisense to the corresponding mRNA thereof.

269. (New) The method of claim 260, wherein the particle size is about 0.5 μm to about 10 μm in size.

270. (New) The method of claim 260, wherein the particle size is 10 μm to 500 μm in size.

271. (New) The method of claim 260, wherein the pharmaceutical composition further comprises a surfactant.

272. (New) The method of claim 260, wherein the hyper-responsiveness to adenosine, hyper-responsiveness to increased levels of adenosine, hyper-responsiveness to increased levels of an adenosine receptor, bronchoconsriction, asthma, lung allergy, or lung inflammation is associated with allergy, chronic obstructive pulmonary disease, asthma, acute respiratory distress syndrome, respiratory distress syndrome, cystic fibrosis, or a side effect of adenosine administration.

273. (New) The method of claim 260, wherein the nucleic acid is administered in an amount of about 0.005 to about 150 mg/kg body weight.

274. (New) The method of claim 260, wherein said method is a prophylactic or therapeutic method.

275. (New) The method of claim 260, wherein the oligonucleotide is antisense to the initiation codon, the coding region or the 5' or 3' intron-exon junctions of a gene encoding an adenosine A_1 receptor, adenosine A_{2b} receptor or adenosine A_3 receptor.

276. (New) The method of claim 260, wherein the oligonucleotide comprises the sequence of SEQ ID NO: 1, SEQ ID NO: 3, SEQ ID NO: 5 or SEQ ID NO: 7 to SEQ ID NO: 966, or SEQ ID NO: 1, SEQ ID NO: 3, SEQ ID NO: 5 or SEQ ID NO: 7 to SEQ ID NO: 966, wherein at least one mononucleotide is linked or modified by one or more of phosphorothioate, phosphorodithioate, methylphosphonate, phosphoramidate, boranophosphate, phosphotriester, formacetal, 2'-O-methyl, thioformacetal, 5'-thioether,carbonate, 5'-N-carbamate,sulfate, sulfonate, sulfamate, sulfonamide, sulfone, sulfite, sulfoxide, sulfide, hydroxylamine, methylene (methylimino) and methyleneoxy (methylimino), terminal 1,3-propanediol, terminal dodecanol, 2'-0-methoxyethyl,C-5-propynyl pyrimidine, C-5 methyl cytidine, C-5 ethynyl pyrimidine, 2' propoxy, C-18 amine, N3'-P5 phosphoramidates, 3 '-alkylamino, 2 '-fluoro pyrimidine, 5-fluoro pyrimidine, 5-iodo pyrimidine, 5-bromo pyrimidine, 2'-borano, C-5 hexynyl pyrimidine, 2'-O-(2-methoxy)ethyl, 2'-0-aminopropyl, 5-(phenylethyl) or a peptide nucleic acid interbase linkages or conjugated to a polyethylene glycol, cholesterol, cholesteryl, dehydroepiandrosterone, dehydroepiandrosterone sulfate, dehydroepiandrosterone sulfatide, ubiquinone, dolichol, poly L-lysine, sulfatidic acid or a fatty acid.--

REMARKS

Amendments

Applicant thanks Examiner Epps for the telephone interview granted to Applicant's attorneys on April 8, 2003 regarding the cancellation of all the pending claims and the submission of a new claim set in order to reduce and clarify the issues. New Claim 260, from which new Claims 261-276 depend from, contains the limitations suggested by the Examiner during the interview.